

AMENDMENTS TO THE CLAIMS

Claims 1-6 (CANCELLED)

7. (New) A Stirling engine comprising:

- a cylinder;
- a piston reciprocatably disposed inside the cylinder;
- a displacer that reciprocates with a phase difference relative to the piston;
- a linear motor that drives the piston; and
- a pressure vessel that encloses the cylinder, the piston, and the linear motor,

wherein the linear motor has, at both ends thereof, synthetic resin end brackets, and

wherein the pressure vessel has a division portion formed therein, the division portion being located closer to where the displacer is disposed than to a piston support end of the linear motor in a central portion of the linear motor along an axis thereof.

8. (New) A Stirling engine comprising:

- a cylinder;
- a cylinder reciprocatably disposed inside the piston;
- a displacer that reciprocates with a phase difference relative to the piston;
- a linear motor that drives the piston; and
- a pressure vessel that encloses the cylinder, the piston, and the linear motor,

wherein the pressure vessel has a division portion formed therein, the division portion being formed into a shape that permits both temporary sealing for sealing with a seal member and final sealing for sealing with welding.

9. (New) The Stirling engine of claim 8,
wherein, in the division portion,
a flange-shaped portion is formed on at least one pressure vessel body,
a seal member placement clearance is formed in the flange-shaped portion, and
a welding position is located around an outer circumference of the flange-shaped portion
for final sealing.

10. (New) The Stirling engine of claim 8,
wherein the division portion is located closer to where the displacer is disposed than to a
piston support end of the linear motor.

11. (New) The Stirling engine of claim 9,
wherein the division portion is located closer to where the displacer is disposed than to a
piston support end of the linear motor.